



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,226	08/26/2003	Jin-Biao Huang	TI-36051 (UNITI-171XX)	5419
7590 04/28/2005				
W. Daniel Swayze, Jr. Esq. Texas Instruments Incorporated M/S 3999 P.O. Box 655474 Dallas, TX 75265		EXAMINER ZWEIZIG, JEFFERY SHAWN		
		ART UNIT PAPER NUMBER		
		2816		
DATE MAILED: 04/28/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

24

Office Action Summary	Application No. 10/649,226	Applicant(s) HUANG ET AL.	
	Examiner Jeffrey S. Zweizig	Art Unit 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-4, 7, 9-11 and 14-22 is/are allowed.
- 6) ☒ Claim(s) 1, 5, 6, 8, 12, 13, 23 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Objections

1. In the amendment to claim 1 line 8, "said level and second logic level" should be --said second logic level--.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 5, 6, 8, 12, 13, 23 and 24 remain rejected under 35 U.S.C. 102(b) as being anticipated by Criscione (USPN 6,359,497).

Fig. 1 discloses a comparator 4, cross-coupled logic circuits M8/M9 & M6/M3 and first M1 and second M4 switching elements configured and operating as recited in claims 1, 5 & 6 (also see column 3 lines 39-42).

Claims 8, 12, 13, 23 and 24 remain anticipated for the reasons above.

Response to Arguments

4. Applicants argue that the Criscione circuits M3/M6/M8/M9 are not cross-coupled logic circuits with opposite, non-overlapping outputs. The circuits receive and generate discrete signals and are, therefore, logic circuits. The gates of M6 and M8 are cross-coupled. The output signals to M1 and M4 are clearly complementary or opposite. The outputs clearly switch simultaneously and, therefore, do not overlap.

Response to Amendment

5. The amendments to the claims are not seen to substantially change the scope of the claims and are not seen to overcome the Criscione reference. Applicants' Fig. 4 shows a fixed voltage source V_p . Criscione Fig. 1 shows a voltage source V_HIGH that is not fixed, but may be equal to V_1 or V_2 . It would appear that this is the difference that the amendments are attempting to highlight. The Criscione circuit M3/M6/M8/M9 is seen to have only a first logic level output and a second logic level output (i.e. a high logic level and a low logic level). The high logic level may vary between V_1 and V_2 , but it is still seen as a high logic level and thus as a single logic level. Examiner suggests that the claims be amended to specify that the first and second logic levels each comprise a fixed voltage level.

Allowable Subject Matter


6. Claims 2-4, 7, 9-11 and 14-22 appear to be allowable over the Prior Art or record.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey S. Zweizig whose telephone number is (571) 272-1758. The examiner can normally be reached on Monday thru Thursday 6:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jeffrey S. Zweizig
Primary Examiner
Art Unit 2816

JZ